Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

Claims 1-93 (canceled).

94. (new) An optical semiconductor device comprising:

a bulk crystal substrate of GaN;

lower and upper cladding layers formed epitaxially on said bulk crystal substrate of GaN; and

an active layer formed epitaxially between said lower and upper cladding layers,

said bulk crystal substrate of GaN comprising a slab of a GaN single crystal produced by a process comprising the steps of:

forming a molten flux of a volatile metal element in a pressurized reaction vessel confining therein said molten flux together with an atmosphere containing N (nitrogen), such that said molten flux contains Ga in addition to said volatile metal element;

growing GaN in the form of a single crystal body in said molten flux; and

supplying a compound containing N directly into the atmosphere in said reaction vessel from a source located outside said reaction vessel.

95. (new) The optical semiconductor device as claimed in claim 94, wherein said GaN single crystal slab has a stoichiometric composition in the thickness direction thereof.

96. (new) An electron device comprising:

a bulk crystal substrate of GaN;

a channel layer formed epitaxially on said bulk crystal substrate of GaN;

a gate electrode provided on said channel layer; and

source and drain electrodes provided on said channel layer at respective sides of said gate electrode,

said bulk crystal substrate of GaN comprising a slab of a GaN single crystal produced by a process comprising the steps of:

forming a molten flux of a volatile metal element in a pressurized reaction vessel confining therein said molten flux together with an atmosphere containing N (nitrogen), such that said molten flux contains Ga in addition to said volatile metal element;

growing GaN in the form of a single crystal body in said molten flux; and

supplying a compound containing N directly into the atmosphere in said reaction vessel from a source located outside said reaction vessel.

97. (new) The electron device as claimed in claim 96, wherein said GaN single crystal slab has a stoichiometric composition in the thickness direction thereof.